



Application No. 10/697,295
Amendment dated September 12, 2006
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IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for performing multiplex PCR for having at least two amplified DNA products from samples positioned within a PCR equipment, characterized in that the primer annealing temperature and extension time are changed by a constant amount per constant number of cycles,

wherein said annealing temperature increase by a value of $((Tm_{max} - Tm_{min}) / \text{number of total cycles})$ per cycle, wherein said Tm_{max} indicates the highest melting temperature among all the primers and said Tm_{min} indicates the lowest melting temperature among all the primers, and

said extension time increases by value $((L_{max} - L_{min}) / (\text{rate of DNA synthesis of tag DNA polymerase: bp/sec}) / (\text{number of total cycles} - 7)$ per cycle, wherein said L_{max} indicates the size of the largest PCR product, and said L_{min} indicates the size of the shortest PCR product.

2. (Previously Presented) The method in claim 1,

wherein said samples are blood, plasma, proto DNA (vector), cDNA library, genome, or cellular tissue including genome.

3. (Previously Presented) The method in claim 2,

wherein said samples are diluted.

4. (Previously Presented) The method as set forth in claim 1,

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wherein said PCR equipment can change the primer annealing temperature and extension time by a constant amount per constant number of cycles.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The method as set forth in claim 23,
wherein said diluted samples each has a volume of less than 1 μ L.